# Before the FEDERAL COMMUNICATIONS COMMISSION Washington, D. C. 20554

| In the Matter of                      | ) |                      |
|---------------------------------------|---|----------------------|
|                                       | ) |                      |
| Petition of Qwest Corporation for     | ) | WC Docket No. 09-135 |
| Forbearance Pursuant to               | ) |                      |
| 47 U.S.C. § 160(c) in                 | ) |                      |
| Phoenix Metropolitan Statistical Area | ) |                      |

### DECLARATION OF DR. MICHAEL D. PELCOVITS

### 1. Introduction

My name is Michael D. Pelcovits. I am a principal with the consulting firm Microeconomics and Research Associates, Inc. ("MiCRA"). I have been asked by Cavalier Telephone Corporation ("Cavalier") to provide an update to the economic analysis that I provided on April 21, 2009 concerning issues raised by the forbearance petition submitted by the Verizon Telephone Companies in WC Dockets No. 08-24 and No. 08-49 ("Verizon"). In this prior declaration I addressed whether wireless services should be considered in the same product market as wireline services for residential and small business customers (commonly referred to as "mass market" customers). I concluded that Verizon had failed to demonstrate that wireless services constitute an effective competitive constraint on wireline services, and therefore that the Commission should not forebear from requiring Verizon to provide unbundled DS0 loops. I further

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<sup>&</sup>lt;sup>1</sup> That analysis was filed in this docket as an attachment to Cavalier's opposition to Qwest's petition. *See* Cavalier Telephone, LLC Opposition to Qwest Petition for Forbearance, Attachment, WC No. 09-135 (filed Sept. 21, 2009).

explained that Verizon's attempt to broaden the market to include wireless services was based on a fundamental error of economic analysis – namely, by confusing a decline in demand with an increase in demand elasticity.

In this present declaration, I undertake several tasks. First, in Part 2, I review the economic paradigm relied on in my prior declaration. Second, in Parts 3 and 4, I consider the Arizona-specific evidence submitted by Qwest as well as the latest data on wireless "cord cutting" to assess whether my prior analysis is still sound and should be applied to the present case. Third, in Part 5, I explain that regardless of Qwest's evidence of alleged wireless substitution with respect to wireline voice service, there is little evidence of similar substitution with respect to wireline data service.

#### 2. **Market Definition Needed For Analyzing Forbearance**

The standard used for defining product markets in antitrust cases is whether a hypothetical profit-maximizing monopolist, not subject to price regulation, would impose a small but significant nontransitory increase in the price of the product.<sup>2</sup> The determination of a product market typically centers on analysis of evidence of consumers' willingness to substitute among different products in response to price changes. In the context of the residential and small business voice and data markets, therefore, the relevant question is whether wireless services would constrain a hypothetical wireline monopoly provider of voice and data services to these customers.

Wireless voice service substitutes for wireline voice service but not for all purposes or for all users. This is apparent from casual observation as well as from

<sup>2</sup> See U.S. Department of Justice and the Federal Trade Commission, Horizontal Merger Guidelines,

Issued: April 2, 1992, Revised: April 8, 1997, Section 1.0; see also In the Matter of Regulatory Treatment of LEC Provision of Interexchange Services, 12 FCC Rcd 15756, 15775 ¶ 28 (1997) ("[I]n the case of the relevant product market, we must consider whether, if all carriers raised the price of a particular service or group of services, customers would be able to switch to a substitute service offered at a lower price.").

statistics about cord cutting and usage substitution. The Qwest petition emphasizes these statistics, as did the Verizon petitions before it. But as in the case of Verizon, Qwest has failed to provide statistical analysis of the *degree* of wireline-wireless substitutability, and the ability of Qwest to raise and sustain price above competitive levels notwithstanding the presence of competitors – including the wireless industry. The methods used to test the degree of substitutability would include, for example: econometric analysis of the demand for wireline service, including the cross elasticity between wireline and wireless service, and analysis of customer switching patterns (*i.e.* diversion) between wireline and wireless in response to changes in the marketplace.

Qwest could undertake rigorous statistical analysis of wireline-wireless substitutability, but has not produced such evidence along with its petition. Rather it simply asserts that "the existence of wireless alternative constrains Qwest's ability to raise prices for wireline basic exchange service." That conclusory assertion cannot substitute for empirical analysis. The key test is *how much switching* between wireline and wireless access *is due to changes in the relative prices* (*i.e.* the cross-elasticity of demand). If the customers switch between wireline and wireless access but *not in response to price changes*, then wireless is not a close substitute and cannot prevent the exercise of market power in the wireline market.

### 3. New Evidence Provided in the Owest Petition

In the instant petition, Qwest relies primarily on the results of a telephone survey of Phoenix MSA households conducted by Market Strategies.<sup>4</sup> The survey asserts that

<sup>3</sup> Owest Petition at 21.

<sup>&</sup>lt;sup>4</sup> Qwest also provides a September 17, 2008 study conducted by Nielsen Mobile. This study was available to me prior to preparing my declaration on the Verizon petitions, and adds nothing new to the record on the issue of wireless-wireline substitution.

approximately one-fourth of the households in the MSA use only wireless service. The survey also purports to show household penetration of wireless-only households relative to wireline households by certain demographic characteristics. Finally, the survey makes claims about the market share of the wireless providers in the Phoenix market.

This "new" evidence is of very limited value to the central issue raised by the Qwest petition, *i.e.* whether wireless service constrains wireline pricing. Although cord cutting is perhaps somewhat higher in Phoenix than the nationwide average, this does not mean that Qwest's market power is constrained any more effectively in this market than in other parts of the country. The households that have already cut the cord are not at issue; Qwest has already lost those customers. The other three-quarters of the households are at issue, and there is no evidence that these households would switch to wireless if Qwest raised its prices by a "small but significant and nontransitory" amount. And there is certainly no evidence that three-quarters of the households in Phoenix are any more sensitive to wireline price increases than the eighty percent or so households in the rest of the country that have not cut the cord.

At most, Qwest's survey has shown only that five percent more of the households in Phoenix have cut the cord than the average across the country. This could be due to a number of demographic factors, such as the growth in population, the higher proportion of Hispanics, or a different age distribution than elsewhere. There is no reason to believe, however, that the households that have not cut the cord are any different than in other places, or any less likely to be harmed by an exercise in market power by Qwest.

Qwest asserts that it is not necessary to show that all customers view wireless as a substitute for wireline service, so long as "enough customers" are willing to cut the cord.<sup>5</sup> This is conceptually correct, but useless without an empirical study showing that the loss of customers would be enough to make it unprofitable for the hypothetical monopolist to raise price. This type of analysis, which is referred to as a "critical loss" study, is often performed in antitrust cases for precisely this reason. Moreover, this would require an examination of whether Qwest could price discriminate across customers with different willingness to substitute for wireline service. Qwest has provided no such analysis.

# 4. New Evidence on Marketplace Trends

In my prior declaration I discussed estimates of cord cutting produced by the Center for Disease Control (CDC) from its biennial National Health Interview Survey.

There have been two additional CDC surveys conducted since I prepared that report.

These show that cord cutting has increased from 16.1% of adults in the first half of 2008, to 18.4% of adults in the second half of 2008, to 21.1% in the first half of 2009.6

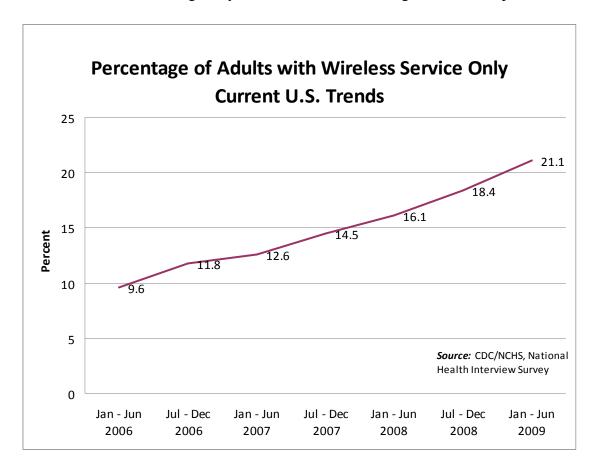
The trend in cord cutting over the last several years is relatively constant as shown in the graph below. Approximately three to four percent of the households with wireline service cut the cord each year. This trend may be related to a number of factors, such as the aging of the population that started out with wireless service a number of years ago. In any case, there is still significant correlation between cord cutting and demographic factors.<sup>7</sup> The perseverance of these demographic relationships, and the large base of

<sup>&</sup>lt;sup>5</sup> Qwest Petition at 16-21.

<sup>&</sup>lt;sup>6</sup> Stephen Blumberg & Julian Luke, Centers for Disease Control and Prevention, *Wireless Substitution: Early Release of Estimates from the National Health Interview Survey, January-June 2009*, available at <a href="http://www.cdc.gove/nchs/nhis.htm">http://www.cdc.gove/nchs/nhis.htm</a>.

<sup>&</sup>lt;sup>7</sup> For example, only 5.4% of adults 65 years and older have cut the cord, *see id.* at 8.

customers that have not cut the cord, are powerful evidence that price is unlikely a dominant factor influencing many customers' choices among voice service providers.



In my prior declaration I presented evidence that few customers that cut the cord ported their wireline number to new wireless service. This trend continues. The table below shows total quantity of telephone numbers in the porting database at the end of each calendar quarter categorized by type of carrier (wireline or wireless) providing service before and after the number port. The incidence of porting between wireline and wireless is a small fraction of the porting within each category of service providers. This is consistent with a market where substitution (and price sensitivity) is much more pronounced among the providers of each category of service rather than across the categories.

Analysis of Porting Data
Number of Lines in Thousands - By Period and Transition Type

| Ported During |         | Wireline to | Wireline to | Wireless to | Wireless to |
|---------------|---------|-------------|-------------|-------------|-------------|
| Year          | Quarter | Wireline    | Wireless    | Wireless    | Wireline    |
| 2004          | First   | 1,251       | 107         | 656         | 2           |
|               | Second  | 1,231       | 76          | 760         | 8           |
|               | Third   | 1,268       | 156         | 911         | 7           |
|               | Fourth  | 1,209       | 97          | 928         | 4           |
| 2005          | First   | 1,471       | 75          | 917         | 4           |
|               | Second  | 1,563       | 65          | 1,001       | 3           |
|               | Third   | 1,782       | 86          | 1,163       | 4           |
|               | Fourth  | 1,589       | 57          | 1,197       | 12          |
| 2006          | First   | 2,312       | 47          | 1,183       | 4           |
|               | Second  | 1,858       | 59          | 1,232       | 4           |
|               | Third   | 1,660       | 105         | 1,430       | 5           |
|               | Fourth  | 1,675       | 86          | 1,472       | 5           |
| 2007          | First   | 1,809       | 83          | 1,479       | 5           |
|               | Second  | 2,040       | 122         | 1,564       | 4           |
|               | Third   | 2,549       | 223         | 1,947       | 22          |
|               | Fourth  | 4,093       | 203         | 2,338       | 9           |
| 2008          | First   | 2,815       | 664         | 2,225       | 8           |
|               | Second  | 2,870       | 72          | 2,205       | 7           |
|               | Third   | 3,012       | 121         | 2,977       | 7           |
|               | Fourth  | 3,033       | 132         | 2,969       | 6           |
| 2009          | First   | 3,052       | 127         | 2,974       | 8           |
|               | Second  | 3,335       | 127         | 3,052       | 7           |
|               | Third   | 3,572       | 236         | 3,645       | 9           |

**Source:** Federal Communications Commission. *Numbering Resource Utilization in the United States: Table 16.* February 2010.

The evidence on porting also sheds light on the issue of whether customers in Phoenix are more likely to shift from wireline to wireless service in response to price changes than are customers in other markets. As shown in the table below, there are only 27,000 ports from wireline-to-wireless in Arizona. By comparison, nationwide there are 2.5 million wireline-to-wireless ports. In proportion to the size of the State, therefore, Arizona wireline customers are less likely to port their numbers to a wireless provider than in the rest of the country. This may indicate that the cord cutting that occurs in Arizona is less a sign of substitution on the margin between wireline and wireless and more a reflection of the greater mobility of the population or other demographic factors.

Porting Activity in Arizona and the United States

| Activity               | Arizona    | Total U.S.  |
|------------------------|------------|-------------|
| Wireline to Wireless   | 27,000     | 2,539,000   |
| Total Assigned Numbers | 13,348,000 | 668,514,000 |
| Percentage             | 0.202%     | 0.380%      |

**Source:** Federal Communications Commission. *Numbering Resource Utilization in the United States: Tables 17 and 19*. February 2010.

## 5. Wireless Substitution in the Broadband Market

In my prior declaration I analyzed whether wireless broadband service could effectively constrain pricing of a hypothetical broadband wireline service provider. Based on a review of the services available in the Virginia Beach area, I concluded that wireless broadband services are not an effective substitute, because they are typically more expensive, slower, and less flexible than wireline broadband service. I have recently collected comparable information, which is summarized in the tables below, on the broadband services available in the Phoenix market. The clear differences between the prices and capability of broadband services provided by wireline and wireless providers in this market lead me to reach the same conclusion as I did in the Verizon proceeding. Namely, there is no basis on which to conclude that wireless broadband service belongs in the same product market as wireline broadband service. Accordingly, Qwest's failure to show that wireless service constrains wireline pricing in the broadband market provides an independent reason to continue to require Qwest to unbundle local loops.

### Wireless Broadband Services in the Phoenix Area

| Company          | Service Name                                | Monthly Maximum<br>Allowance | Monthly Price | Average Download<br>Speed (in Kbps) | Average Upload<br>Speed (in Kbps) |
|------------------|---|------------------------------|---------------|-------------------------------------|-----------------------------------|
| AT&T             | DataConnect                                 | 5GB                          | 60.00         | 700-1700                            | 500-1200                          |
| Cricket          | Broadband \$40 Plan                         | 5GB                          | 40.00         | Up to 600                           |                                   |
| Sprint           | Mobile Broadband<br>Connection Plan - 3G/4G | 4G - None<br>3G - 5GB        | 59.99         | 3000-6000<br>600-1400               | 375                               |
| T-Mobile         | Even More webConnect<br>Overage Free Plan   | 5GB                          | 39.99         | 600-1000                            | 300                               |
| U.S. Cellular    | Wireless Modem Plan                         | 5GB                          | 49.95         | Up to 768                           | 500-800                           |
| Verizon Wireless | Mobile Broadband Plan -<br>5GB              | 5GB                          | 59.99         | 600-1400                            | 500-800                           |
| Verizon Wireless | Mobile Broadband Plan -<br>250MB            | 250MB                        | 39.99         | 600-1400                            | 500-800                           |

#### Sources

www.mobile-broadband-reviews.com

http://www.verizonwireless.com/b2c/mobilebroadband/?page=plans&lid=//global//plans//mobile+broadband

http://shop.sprint.com/NASApp/onlinestore/en/Action/DisplayPlans?INTNAV=ATG:HE:Plans

http://www.wireless.att.com/businesscenter/popups/general/available-data-rate-plans.jsp?wtLinkName=LaptopConnectCard&wtLinkLoc=BDY

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http://www.uscellular.com/uscellular/common/common.jsp?path=/wireless-modems/index.html

http://www.mycricket.com/broadband/plans/40bb\_rpr

#### Wireline Broadband Services in the Phoenix Area

| Company | Service Name                  | Download Speed<br>(Mbps) | Upload Speed<br>(Kbps) | Monthly Price |
|---------|-------------------------------|--------------------------|------------------------|---------------|
| Qwest   | High-Speed Internet           | 1.5                      | 896                    | 19.99         |
|         | High-Speed Internet           | 7                        | 896                    | 25.00         |
|         | High-Speed Internet           | 12                       | 896                    | 35.00         |
|         | High-Speed Internet           | 20                       | 896                    | 45.00         |
| Cox     | High Speed Internet Essential | 3                        | 384                    | 32.95         |
|         | High Speed Internet Preferred | 15                       | 3000                   | 46.95         |
|         | High Speed Internet Premier   | 25                       | 5000                   | 64.99         |

#### Sources

http://www.qwest.com/residential/internet/broadbandlanding/

http://ww2.cox.com/residential/arizona/home.cox

# 6. Conclusion

Qwest has failed to analyze the wireless substitution issue properly, and added nothing to the debate beyond the same assertions made by Verizon in its forbearance petitions. Therefore, my conclusions from the prior declaration remain the same. There is no evidentiary basis for the Commission to conclude that wireless service effectively constrains wireline prices in either the voice or data markets.

I declare under penalty of perjury that the forgoing is true and correct. Executed this 29th day of April, 2010, at Washington, D.C.

Michael D. Pelcovits